

2007 California Physical Fitness Test

Report to the Governor and the Legislature

**Prepared by
California Department of Education**

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Introduction

In spring 2007, physical fitness testing was conducted in California public schools in grades five, seven, and nine. The test used for physical fitness testing is the *FITNESSGRAM*®, designated for this purpose by the State Board of Education. This report summarizes results of the 2007 test administration, and provides a summary comparison with the results from 2005 and 2006.

Background

Education Code Section 60800 specifies that the California Department of Education shall compile the results of the physical performance test and submit a report every two years, by December 31, to the Governor and the Legislature. This report fulfills that statute.

Description of the Test

The *FITNESSGRAM*® was developed by The Cooper Institute in Dallas, Texas with the primary goal of assisting students in establishing physical activity as part of their daily lives. Because of this goal, the *FITNESSGRAM*® provides a number of performance options so that all students, including those with special needs, have the maximum opportunity to participate.

Physical fitness testing consists of three broad components of fitness: 1) aerobic capacity, 2) body composition, and 3) muscular strength, endurance, and flexibility. To ensure comprehensive measurement of all three components, the *FITNESSGRAM*® is comprised of the following six fitness areas with multiple performance options in most areas:

- **Aerobic Capacity** – Progressive Aerobic Cardiovascular Endurance Run (PACER), One-Mile Run, or Walk Test
- **Body Composition** – Skinfold Measurements, Body Mass Index, or Bioelectric Impedance Analyzer
- **Abdominal Strength and Endurance** – Curl-Up
- **Trunk Extensor Strength and Endurance** – Trunk Lift
- **Upper Body Strength and Endurance** – Push-Up, Modified Pull-Up, or Flexed-Arm Hang
- **Flexibility** – Back-Saver Sit and Reach or Shoulder Stretch

More detailed information regarding the *FITNESSGRAM*®, the six fitness areas, and the performance criteria can be found at the California Department of Education Web site: <http://www.cde.ca.gov/ta/tg/pf/>.



The Fitness Criteria

The *FITNESSGRAM*® uses objective criteria to evaluate fitness performance. These criteria represent a level of fitness that offers a degree of protection against diseases resulting from physical inactivity. Performance on each of the fitness-area tests is classified into two general levels:

- Healthy Fitness Zone
- Needs Improvement (i.e., not in the Healthy Fitness Zone)

The desired performance goal for each fitness-area test is the Healthy Fitness Zone (HFZ). Test results within the HFZ reflect reasonable levels of physical fitness that can be attained by most students. All students should strive to achieve a score within the HFZ for each fitness-area test.

Results of 2007 Testing

A total of 1,370,315 students were administered the California Physical Fitness Test (PFT) in 2007, representing approximately 90 percent of California public school students enrolled in grades five, seven, and nine.

Tables 1 and 2 provide an overall summary of the results of the 2007 PFT by grade level. The percent of students in the Healthy Fitness Zone (HFZ) for each fitness area is presented in Table 1, and the percent of students meeting the HFZ criteria by the number of physical fitness areas is presented in Table 2. Both tables include comparison data from 2005 and 2006.

Table 1: Percentage of Students in the Healthy Fitness Zone by Fitness Area (2005-07)

Physical Fitness Area	Grade 5			Grade 7			Grade 9		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Aerobic Capacity	58.4	60.2	62.7	59.8	60.5	62.2	50.9	52.4	55.5
Body Composition	66.4	67.4	67.9	66.7	67.0	67.7	66.9	68.0	68.7
Abdominal Strength	80.2	80.6	80.2	83.7	83.1	83.5	81.3	82.6	84.0
Trunk Extensor Strength	87.4	88.2	87.9	88.5	89.3	89.6	84.3	86.3	87.9
Upper Body Strength	66.6	67.1	68.5	68.5	68.7	70.1	68.7	69.5	72.2
Flexibility	65.7	66.6	68.1	71.5	72.4	73.9	69.3	70.3	73.6

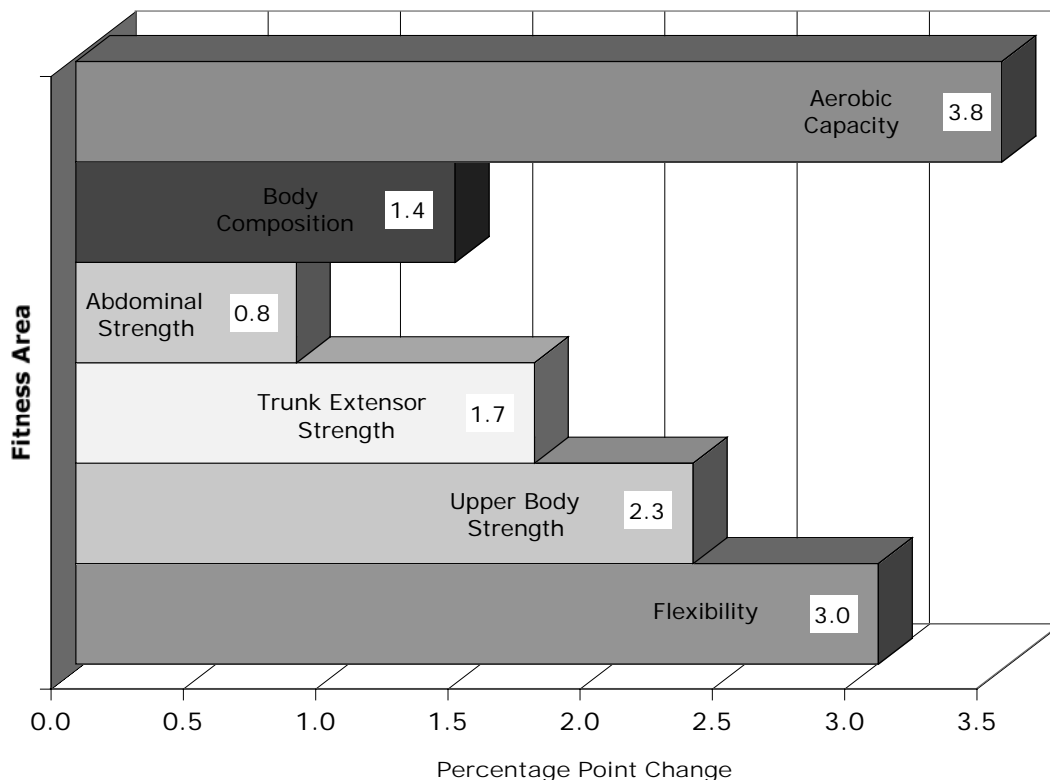


As summarized in the bullet points below* the data in Table 1 indicate that while a majority of students across all grades tested met minimum fitness levels for each area in 2007, a notable percentage of students did not.

- Aerobic Capacity: 56-63 percent of students were in the HFZ
- Body Composition: 68-69 percent of students were in the HFZ
- Abdominal Strength: 80-84 percent of students were in the HFZ
- Trunk Extensor Strength: 88-90 percent of students were in the HFZ
- Upper Body Strength: 69-72 percent of students were in the HFZ
- Flexibility: 68-74 percent of students were in the HFZ

Of the six fitness areas tested, overall scores for Trunk Extensor Strength in 2007 were the highest (average percent in the HFZ = 88.5 percent), while overall scores for Aerobic Capacity were the lowest (average percent in the HFZ = 60.1 percent).

Figure 1: Average Change in the Percentage of Students in the Healthy Fitness Zone by Fitness Area (2005-07)



*The figures shown in the bullet points have been rounded to the nearest percent.



From 2005 to 2007, there was an increase in the percentage of students in the HFZ in all six physical fitness areas across all three grade levels. As shown in Figure 1, the largest increase in the overall percentage of students in the HFZ between 2005 and 2007 was for Aerobic Capacity (average change = 3.8 percentage points), while the smallest increase between 2005 and 2007 was for Abdominal Strength (average change = 0.8 percentage points).

Table 2: Percentage of Students by Number(s) of Areas in the Healthy Fitness Zone (2005-07)

Number of Areas in the Healthy Fitness Zone	Grade 5			Grade 7			Grade 9		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
6 of 6	24.5	25.6	27.1	28.8	29.6	30.9	26.7	27.4	30.1
5 of 6	26.3	26.4	26.3	26.6	26.1	26.2	26.3	26.4	26.5
4 of 6	20.7	20.5	20.2	19.3	19.2	19.1	19.2	19.4	19.2
3 of 6	14.4	14.0	13.7	12.7	12.9	12.5	12.1	12.7	12.2
2 of 6	8.2	8.2	8.0	7.2	7.3	7.0	6.6	6.8	6.3
1 of 6	3.7	3.7	3.6	3.1	3.1	3.0	3.2	3.3	2.9
0 of 6	1.8	1.5	1.2	2.3	1.9	1.3	5.8	4.0	2.8

NOTE: Columns may not add up to 100 percent due to rounding.

The PFT performance goal is to achieve the HFZ for all six fitness areas tested. As shown in Table 2, between 27 and 31 percent of students met this goal in 2007.

- Grade Five: 27.1 percent of students achieved the HFZ in six areas
- Grade Seven: 30.9 percent of students achieved the HFZ in six areas
- Grade Nine: 30.1 percent of students achieved the HFZ in six areas

The corollary outcome of these findings is that approximately 70 percent of public school students have not met the HFZ for all six fitness areas.



Figure 2: Change in the Percentage of Students in Six of Six Healthy Fitness Zones by Grade (2005-07)

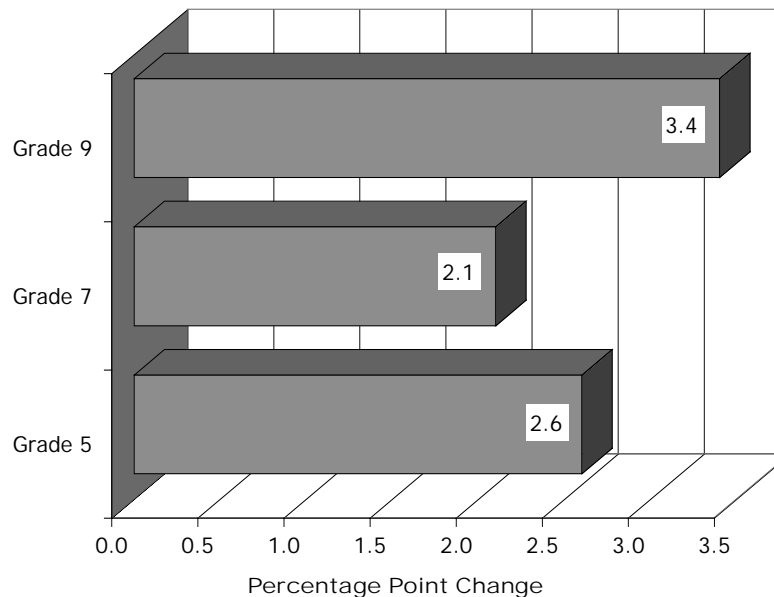


Figure 2 shows the 2005-2007 change in the percent of students achieving the HFZ in six of six areas by grade. All grade levels tested showed an increase over this period.

- Grade Five: increased 2.6 percentage points
- Grade Seven: increased 2.1 percentage points
- Grade Nine: increased 3.4 percentage points

Summary and Implications

This is the eighth year that quality data about the fitness of California's youth has been reported. Full and complete public access to the summary data is available at <http://www.cde.ca.gov/ta/tg/pf/>. This Web site provides reports for the state and every county, school district, and school.

Current data show that while a minority of California students at the three grade levels tested are meeting the performance goal established for the PFT, gains are being made from year-to-year. There remains much work to do to ensure high levels of fitness for students in California. All students could benefit from a greater emphasis on areas of physical fitness, especially aerobic capacity, body composition, upper body strength, and flexibility.

School and district administrators, teachers, parents, and guardians can examine the data to get a more complete picture of the yearly fitness levels of their students and children. School districts and schools are encouraged to use the data they receive from this test to examine and make



important changes to their physical education programs. Schools and parents and guardians have the opportunity to work together to use this information to inform plans and strategies to improve the physical activity opportunities offered to students during and outside of the regular school day. Collaboration among educators and families is key to effectively increasing the health-related physical fitness of all California's students.